

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 09/236,897
Attorney Docket No.: Q53086

REMARKS

Claims 5, 6, 8, 9, and 13-38 are all the claims pending in the Application. By this Amendment, Applicant amends claims 9, 16, 21, and 24 to further clarify the invention and claim 26 for better conformity with claim 25.

Preliminary Matter

As a preliminary matter, the Examiner has not returned the initialed form PTO/SB/08 submitted with the Information Disclosure Statement filed on October 26, 2005. Applicant respectfully requests the Examiner to initial and return form PTO/SB/08.

Summary of the Office Action

Claims 5, 6, 8, 9 and 13-38 presently stand rejected.

The Office Action, however, fails to address claims 34-37 in the body of the Office Action. That is, the previously added claims 34-37 are not treated on their merits. In every Office Action, each pending claim should be mentioned by number, and its treatment or status given. MPEP 707.07(i). Applicant respectfully requests the Examiner to issue a new Non-Final Office Action addressing all claims.

Prior Art Rejections

Claims 5, 6, 8, 9 and 13-33, and 38 are rejected under 35 U.S.C. § 103(a).

Claims 5, 6, 9, 13-28, 30-32, and 38

Claims 5, 6, 9, 13-28, 30-32 and 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,296,069 to Smith et al. (hereinafter "Smith") in view of U.S. Patent No. 6,180,061 to Bogen et al. (hereinafter "Bogen") and U.S. Patent No. 5,059,393 to

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Quenin et al. (hereinafter “Quenin”). Applicant respectfully traverses this prior art rejection in view of the following comments.

Independent claim 5 recites: “a temperature control means for automatically maintaining the first chemical analysis element at a first predetermined temperature suitable for measuring the optical density of the color formed by the coloring reaction and holds the second chemical analysis element at a second predetermined temperatures suitable for measuring ionic activity; wherein the first predetermined temperature and the second predetermined temperature are differentiated by making an amount of heat transmitted to the first chemical analysis element different from that transmitted to the second chemical analysis element.”

The Examiner alleges that these unique features of the claim do not further define the structural components but are instead directed to the operation of the device (*see* page 6 of the Office Action). It is respectfully noted, however, that the wherein clause in claim 5 further defines the structure of the temperature control means. That is, the wherein clause of claim 5 further defines that the temperature control means automatically maintaining two different temperatures for various types of activities. Accordingly, the wherein clause of claim 5 structurally limits the unique features of the chemical analysis system.

Moreover, in response to Applicant’s arguments, the Examiner alleges that since Bogen discloses each slide having its own heating element, different temperatures can be maintained. Accordingly, the Examiner reasons that Bogen cures the deficient teachings of Smith and Quenin (*see* page 6 of the Office Action). Applicant respectfully disagrees.

As explained in the Amendment under 37 C.F.R. § 1.114 filed on October 26, 2005, the allegation that the slides can be maintained at different temperatures because each has a heating

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element is a mere speculation. This speculation is not substantiated with the disclosure from Bogen.

That is, Bogen discloses one electronic control for all the heating elements (*e.g.* claim 1). In particular, Bogen discloses a microprocessor, which controls the entire dispensing assembly 500. That is, an operator programs the microprocessor with the information such as the location of reagents on the reagent rotor and the location of slides on the slide rotor. The operator then programs the particular histochemical protocol to be performed on the tissue samples. Variables in these protocols can include the particular reagent used on the tissue sample, the time that the tissue sample is allowed to react with the reagent, whether the tissue sample is then heated to expose or develop the tissue sample, the rinse that is then used to deactivate the reagent, followed by the subsequent removal of the rinse and reagent to allow subsequent exposure to a possibly different reagent. The dispensing assembly enables complete random access, *i.e.* any reagent to any slide in any sequence (col. 8, lines 16 to 30).

In short, Bogen discloses a manual system, where the operator must manually enter all the information into the microprocessor including whether the slide is to be heated. Bogen, however, does not disclose or suggest heating the slides to different temperatures. Moreover, Bogen fails to disclose or suggest a control means that would automatically set various different temperatures for various slides. In Bogen, the operator has to manually input all information into the microprocessor.

That is, Bogen's heating elements along with the microprocessor fail to disclose or suggest a control means that would automatically maintain the first and second elements at different temperatures. For example, Bogen's microprocessor cannot recognize the type of slide

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and based on the type of slide, hold it at a certain temperature. Moreover, Bogen's microprocessor cannot determine that a particular temperature should be used for measuring the optical density and another temperature should be used for measuring ionic activity. That is, Bogen's microprocessor is manually operated and does not determine which temperature for which activity.

It is respectfully noted, therefore, that alleging that the slides can be maintained at different temperatures because each has a heating element is a mere speculation. A "prima facie" case of obviousness, at the very least, would require cogent scientific/technical reasoning and/or some objective factual basis to support the Examiner's conclusion that the alleged elements encompass the claimed functions. However, no such support has accompanied the Examiner's conclusory assertion.

In short, Bogen's microprocessor along with the heating elements are structurally different from the temperature control means set forth in claim 5. Accordingly, Bogen does not cure the deficient teachings of Smith. Quenin is only cited for its disclosure of the bar code reader and as such clearly fails to cure the deficient teachings of Bogen and Smith.

Therefore, "a temperature control means for automatically maintaining the first chemical analysis element at a first predetermined temperature suitable for measuring the optical density of the color formed by the coloring reaction and holds the second chemical analysis element at a second predetermined temperatures suitable for measuring ionic activity; wherein the first predetermined temperature and the second predetermined temperature are differentiated by making an amount of heat transmitted to the first chemical analysis element different from that transmitted to the second chemical analysis element," as set forth in claim 5, is not disclosed or

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suggested by the combined teachings of Smith, Bogen, and Quenin, which lack having a control means for automatically maintaining the first element at a required temperature for measuring ionic activity and another element at a temperature for measuring the optical density, where the two temperatures are different.

For at least these exemplary reasons, claim 5 is patentable over the combined teachings of Smith, Bogen, and Quenin. It is appropriate and necessary for the Examiner to withdraw this rejection of claim 5. Claims 6 and 13-15 are patentable at least by virtue of their dependency on claim 5.

Next, independent claim 9 recites: "a temperature control device comprising a temperature control element and a first pressing member for the first chemical analysis element in the incubator and a second pressing member for the second chemical analysis element in the incubator, the temperature control device holds the first and second chemical analysis elements at predetermined temperatures;...wherein the first predetermined temperature and the second predetermined temperature are differentiated by making an amount of heat transmitted to the first chemical analysis element different from that transmitted to the second chemical analysis element."

The Examiner alleges that Smith's retainer 88 and clips 100 disclose these pressing elements set forth in claim 9. In Smith, however, the retainer 88 is for holding the slide 15 in position until it is moved into an incubator (col. 4, lines 45 to 50). That is, the retainer 88 is not a pressing member for the element in the incubator. Moreover, in Smith, the clips 100 simply hold the slides in the incubator (col. 5, lines 1 to 7). The clips 100 are unrelated to the temperature control. Moreover, there are only type of identical clips 100 and not different types of clips for

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holding different elements at different temperatures. Accordingly, Smith fails to disclose or suggest the temperature control device that would include two pressing members for holding slides in the incubator: one for each type of slide.

Quenin and Bogen fail to cure the deficient teachings of Smith. Therefore, claim 9 is patentable over the combined disclosure of Smith, Bogen, and Quenin. In view thereof, it is appropriate and necessary for the Examiner to withdraw this rejection of claim 9 and its dependent claim 24.

In addition, dependent claim 24 recites: "the first pressing member only holding the first chemical analysis element in the incubator is different in shape from the second pressing member only holding the second chemical analysis element in the incubator." In Smith, there are only one type of clips, clips 100. That is, Smith fails to disclose or suggest having different types of clips 100 for different types of slides. Quenin and Bogen fail to cure the deficient teachings of Smith. For at least this additional exemplary reason, claim 24 is patentable over the combined teachings of Smith, Bogen, and Quenin.

Independent claims 16, 21, and 22 recite features similar to, although not necessarily coextensive with, the features argued above with respect to claim 5. Therefore, arguments presented with respect to claim 5 are respectfully submitted to apply with equal force here. For at least substantially analogous reasons, therefore, independent claims 16, 21, and 22 are patentable over the combined teachings of Smith, Bogen, and Quenin.

In addition, claim 16 recites: "the temperature control means comprises one single heating means that cooperates with a first pressing member holding the first chemical analysis element in the incubator and a different second pressing member holding the second chemical

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analysis element in the incubator.” The Examiner alleges that Smith’s clips 100 disclose the pressing members as set forth in claim 16 (*see page 3 of the Office Action*). Smith, however, fails to disclose or suggest the clips 100 cooperating with the heater. Moreover, the clips 100 are the same regardless of whether they hold the first or second slide. That is, Smith fails to disclose or suggest having different clips for different types of slides and having the clips cooperate with a heater for controlling temperature of the slide. Quenin and Bogen fail to cure the deficient teachings of Smith. For at least these additional exemplary reasons, claim 16 is patentable over the combined teachings of Smith, Bogen, and Quenin. Claims 17-20 are patentable at least by virtue of their dependency on claim 16.

Furthermore, independent claim 21 recites: “means for automatically inserting the first and second chemical analysis elements into given holding portions in the incubator according to type of chemical analysis element.” The Examiner alleges that Smith’s slide transfer mechanism, which is capable of removing the slide from read station and return the slide to the incubator or discard, discloses the automatic insertion means as set forth in claim 21. Applicant respectfully disagrees.

In Smith, the slide transfer mechanism 128 only moves the slides between the transfer location 45 and the read station (Fig. 6; col. 5, lines 49 to 62). That is, Smith fails to disclose or suggest a transfer mechanism that would automatically insert the slides into the incubator at different places or holding portions depending on the type of the slide. Quenin and Bogen fail to cure the deficient teachings of Smith. For at least this additional exemplary reason, claim 21 is patentable over the combined teachings of Smith, Bogen, and Quenin.

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Moreover, independent claim 22 further recites: "means for inserting the first and second chemical analysis elements into given positions in the incubator according to type of chemical analysis element." The Office Action fails to address these unique features of claim 22. It is respectfully noted that the combined teachings of Smith, Bogen, and Quenin fail to disclose or suggest determining a position to inserting a slide into the incubator based on the slide type. That is, in Smith and Bogen, the slides are inserted in the next available position in the incubator and not based on the slide type. Quenin fails to cure the deficiencies of Smith and Bogen. For at least these additional exemplary reasons, claim 22 is patentable over the combined teachings of Smith, Bogen, and Quenin.

Independent claim 23 recites features similar to, although not necessarily coextensive with, the features argued above with respect to claim 22. Therefore, arguments presented with respect to claim 22 are respectfully submitted to apply with equal force here. For at least substantially analogous exemplary reasons, therefore, independent claim 23 is patentable over the combined teachings of Smith, Bogen, and Quenin.

In addition, independent claim 23 recites: "wherein the given positions determine the predetermined different temperatures at which the first and the second chemical analysis elements are held." The Office Action fails to address these unique features of claim 23. It is respectfully noted that the combined teachings of Smith, Bogen, and Quenin fail to disclose or suggest that based on the position in the incubator the temperature at which to hold an inserted slide is determined. That is, in Smith, the slides are held at the same temperature and in Bogen, the operator sets the temperature; in Bogen, the temperature is not determined based on the position of the slide in the incubator. Quenin fails to cure the deficiencies of Smith and Bogen.

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For at least these additional exemplary reasons, claim 23 is patentable over the combined teachings of Smith, Bogen, and Quenin.

Independent claims 25 and 30 recite features similar to, although not necessarily coextensive with, the features argued above with respect to claim 5. Therefore, arguments presented with respect to claim 5 are respectfully submitted to apply with equal force here. For at least substantially analogous reasons, therefore, independent claims 25 and 30 are patentable over the combined teachings of Smith, Bogen, and Quenin. Claims 26-28 and 31-32 are patentable at least by virtue of their dependency on claim 25 and claim 30, respectively.

Claim 38 is patentable at least by virtue of its dependency on claim 5. Moreover, the combined teachings of Smith, Bogen, and Quenin fail to disclose or suggest different receiving portions, each having a different pressing member for maintaining the slides at different temperatures. Accordingly, for at least this additional exemplary reason, claim 38 is patentable over the combined teachings of Smith, Bogen, and Quenin.

Claims 8, 29, and 33

Claims 8, 29 and 33 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith, Bogen, and Quenin in view of U.S. Patent No. 5,814,277 to Bell et al. (hereinafter "Bell"). Claims 8, 29, and 33 depend on claims 5, 25, and 30, respectively. It was already demonstrated that the combined teachings of Smith, Bogen, and Quenin do not teach or suggest the unique features of the independent claims. Bell is only cited for its teachings of diluting a sample and as such fails to cure the deficient teachings of Smith, Bogen, and Quenin. Accordingly claims 8, 29, and 33 are patentable at least by virtue of their dependency.

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Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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